C010938-02115

ANALYTICA
Environmental Laboratories

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10/10/2005

K. P. Kauffman Co.
1675 Broadway
Suite 2800
Denver, CO 80202
Attn: Kent Gilbert

Work Order #: B0509148
Date: 10/10/2005
Work ID: Wash Bay Testing
Date Received: 9/23/2005
Proj #: None

Sample Identification

Lab Sample Number	Client Description	Lab Sample Number	Client Description
B0509148-01	Wash Bay	B0509148-02	Trip Blank

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. Listings of data qualifiers, analytical codes, key dates, and QC relationships are provided at the end of the report.

Sincerely,

Joe Egry
Project Manager

"The Science of Analysis, The Art of Service"

Case Narrative

Analytica Environmental Laboratories, Inc.

Work Order: B0509148

Samples were prepared and analyzed according to EPA or equivalent methods outlined in the following references:

Methods for Chemical Analysis of Water and Wastes, USEPA 600/4-79-020, March 1983.

USEPA Method 1664, EPA-821-B-94-004b, N-Hexane Extractable Material (HEM) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM) by Extraction and Gravimetry (Oil and Grease and Total Petroleum Hydrocarbons), April 1995.

Pfaff, J. D., C. A. Brockhoff and J. W. O'Dell. 1994. The Determination of Inorganic Anions in Water by Ion Chromatography. Method 300.0A. U. S. Environmental Protection Agency. Environmental Monitoring Systems Lab.

REVIEW FOR COMPLIANCE WITH ANALYTICA QA PLAN
A summary of our review is shown below, organized by test:

SAMPLE RECEIPT:
Two (2) samples were received at ambient temperature at Analytica-Thornton on 9/23/2005 4:45:00 PM. The samples were collected shortly before delivery to the laboratroy. The samples were received in good condition and in order per chain of custody.

The sample was transferred for TOC analysis to Analytica-Alaska (5761 Silverado Way; Unit N Anchorage, Alaska 99734) where they were received at a temperature of 2.1°C. The samples were received in good condition and in order per chain of custody.

Test Method: 120.1 Specific Conductance - Conductivity - Aqueous

HOLDING TIMES:
Holding times were met for this Test

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:
There were no unusual observations.

INITIAL CALIBRATIONS:
Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:
Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:
Closing continuing calibrations were within method criteria or not applicable.

METHOD BLANK OUTLIERS:
There are no method blank outliers.

LCS OUTLIERS:
There are no LCS outliers.

MS/MSD and DUP OUTLIERS:
There are no MS/MSD or DUP outliers.

Test Method: 160.1 - Total Dissolved Solids dried at 180°C - TDS - Aqueous

HOLDING TIMES:
Holding times were met for this Test

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:
There were no unusual observations.

METHOD BLANK OUTLIERS:
There are no method blank outliers.

LCS OUTLIERS:
There are no LCS outliers.

MS/MSD and DUP OUTLIERS:
There are no MS/MSD or DUP outliers.

Test Method: 1664 Hexane Extractable Material - Oil & Grease - Aqueous

HOLDING TIMES:
Holding times were met for this Test

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:
Insufficient sample was provided to perform a matrix spike and matrix spike duplicate. The laboratory prepared an LCS/LCSD to demonstrate method accuracy and precision.

METHOD BLANK OUTLIERS:
There are no method blank outliers.

LCS OUTLIERS:
There are no LCS outliers.

Test Method: 200. 7 - Metals by ICP - Total (new) - Aqueous

HOLDING TIMES:
Holding times were met for this Test

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:
There were no unusual observations.

INSTRUMENT PERFORMANCE CHECKS:
Instrument checks were within method criteria.

INITIAL CALIBRATIONS:
Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:
Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:
Closing continuing calibrations were within method criteria or not applicable.

METHOD BLANK OUTLIERS:
There are no method blank outliers.

LCS OUTLIERS:
There are no LCS outliers.

MS/MSD and DUP OUTLIERS:
There are no MS/MSD or DUP outliers.

Test Method: Aromatic VOCs by GC/PID via method 8021B - BTEX - Aqueous

HOLDING TIMES:
Holding times were met for this Test

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:
There were no unusual observations.

INSTRUMENT PERFORMANCE CHECKS:
Instrument checks were within method criteria.

INITIAL CALIBRATIONS:
Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:
Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:
Closing continuing calibrations were within method criteria or not applicable.

INTERNAL STANDARD AREAS:
There were no Internal Standard outliers.

SURROGATE RECOVERIES:
The method blank shown below has the surrogate outside of control windows. All associated samples have normal surrogate recoveries.

Sample	LabID	Surrogate	Recovery	LCL	UCL	
MB	T051004020-MB	p-Bromofluorobenzene	123	80	120	Complete

METHOD BLANK OUTLIERS:
There are no method blank outliers.

LCS OUTLIERS:
There are no LCS outliers.

MS/MSD and DUP OUTLIERS:
There are no MS/MSD or DUP outliers.

Test Method: Inorganic Anions by Ion Chromatography - Anions by IC - Aqueous

HOLDING TIMES:
Holding times were met for this Test

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:
There were no unusual observations.

There were no unusual observations.

INSTRUMENT PERFORMANCE CHECKS:
Instrument checks were within method criteria.

INITIAL CALIBRATIONS:
Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:
Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:
Closing continuing calibrations were within method criteria or not applicable.

METHOD BLANK OUTLIERS:
Sulfate was detected below the PQL in the method blank indicated below. Any detections of this target in associated samples are flagged with a B to indicate that they are due to laboratory background, unless the sample result is 10X or more the method blank level.

MB Batch	Analyte	Result	PQL	MDL
T050930007	Sulfate	0.460	1.5	0.111

LCS OUTLIERS:
There are no LCS outliers.

MS/MSD and DUP OUTLIERS:
Several targets are out in the batch MS/MSD associated with these analyses, but the sample spiked is not associated with this project.

Test Method: SM2710F - Test on Sludges, Specific Gravity - Specific Gravity - Aqueous

All method criteria was met for this test.

Test Method: SM5310B- Organic Carbon by Combustion and IR. - TOC - Aqueous

HOLDING TIMES:
Holding times were met for this Test

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:
There were no unusual observations.

INITIAL CALIBRATIONS:
Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:
Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:
Closing continuing calibrations were within method criteria or not applicable.

METHOD BLANK OUTLIERS:
There are no method blank outliers.

LCS OUTLIERS:
There are no LCS outliers.

MS/MSD and DUP OUTLIERS:
There are no MS/MSD or DUP outliers.

Test Method: SW6010B - ICP (TCLP Extracted) - 1311-metals - Aqueous

HOLDING TIMES:
Holding times were met for this Test

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:
There were no unusual observations.

INSTRUMENT PERFORMANCE CHECKS:
Instrument checks were within method criteria.

INITIAL CALIBRATIONS:
Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:
Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:
Closing continuing calibrations were within method criteria or not applicable.

METHOD BLANK OUTLIERS:
There are no method blank outliers.

LCS OUTLIERS:
There are no LCS outliers.

MS/MSD and DUP OUTLIERS:
As shown below, the matrix spike and matrix spike duplicate were outside of limits for a couple of the targets. The sample has a Barium concentrations greater than four times spike amount. In this case it is not appropriate to calculate a recovery. The result should be used as a replicate.

Type	Client Sample	LabSample	Analyte	Recovery	LCL	UCL	Parent	Spike
MS	Wash Bay	B0509148-01B	Cadmium	73.0	75	125	-0.0111	0.250
MSD	Wash Bay	B0509148-01B	Barium	56.6	75	125	61.0	10.0
MSD	Wash Bay	B0509148-01B	Cadmium	73.1	75	125	-0.0111	0.250

Test Method: SW7470A - Mercury in Liquid Waste by CVAA (TCLP Extracted) - 1311-Hg - Aqueous

HOLDING TIMES:
Holding times were met for this Test

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:
There were no unusual observations.

INSTRUMENT PERFORMANCE CHECKS:
Instrument checks were within method criteria.

INITIAL CALIBRATIONS:
Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:
Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:
Closing continuing calibrations were within method criteria or not applicable.

METHOD BLANK OUTLIERS:
There are no method blank outliers.

LCS OUTLIERS:
There are no LCS outliers.

MS/MSD and DUP OUTLIERS:
The matrix spike and matrix spike duplicate recoveries shown below indicates a possible matrix effect.

Type	Client Sample	LabSample	Analyte	Recovery	LCL	UCL	Parent Spike
MS	Wash Bay	B0509148-01A	Mercury	7.60	70	130	-0.0000110
0.00500							
MSD	Wash Bay	B0509148-01A	Mercury	0.80	70	130	-0.0000110
0.00500							

Test Method: SW8260B - VOCs by GC/MS (TCLP Extracted) - _1311 - Aqueous

HOLDING TIMES:
Holding times were met for this Test

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:
There were no unusual observations.

INSTRUMENT PERFORMANCE CHECKS:
Instrument checks were within method criteria.

INITIAL CALIBRATIONS:
Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:
Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:
Closing continuing calibrations were within method criteria or not applicable.

INTERNAL STANDARD AREAS:
There were no Internal Standard outliers.

SURROGATE RECOVERIES:

SURROGATE RECOVERIES:
There were no surrogate outliers.

METHOD BLANK OUTLIERS:
There are no method blank outliers.

LCS OUTLIERS:
There are no LCS outliers.

MS/MSD and DUP OUTLIERS:
There are no MS/MSD or DUP outliers.

Test Method: SW8270C - Semivolatile Organics by GC/MS (TCLP Extracted) - 1311-SVOA - Aqueous

HOLDING TIMES:
Holding times were met for this Test

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:
There were no unusual observations.

INSTRUMENT PERFORMANCE CHECKS:
Instrument checks were within method criteria.

INITIAL CALIBRATIONS:
Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:
Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:
The closing CCV, as is typical, has more analytes out of the 20% window than does the opening CCV. SW-846 does not require that closing CCVs meet criteria for internal standard analytical methods such as these. The calibration standard information is included to indicate the degree of analytical system degradation caused by the analysis of the samples. There are no negative consequences for data usability.

RunDate	Data File	Analyte	Recovery	LCL	UCL
10/6/2005 11:40:00 PM	05100617.D	Pentachlorophenol	73.6	80	120

INTERNAL STANDARD AREAS:
There were no Internal Standard outliers.

SURROGATE RECOVERIES:
The sample shown below has one surrogate outside of control windows. This result was confirmed by reanalysis. Data is not qualified if only one base-neutral or one acid surrogate is outside of control windows as long as the recovery is greater than ten percent. These samples meet this criteria. The LCS, and method blank do not show this effect and this is considered likely to be due to sample matrix.

Sample	LabID	Surrogate	Recovery	LCL	UCL	
Wash Bay	B0509148-01A	D14-Terphenyl	25	33	141	Complete
MS	B0509148-01A-MS	D14-Terphenyl	21.	33	141	Complete

MS	B0509148-01A-MS	D14-Terphenyl	21.	33	141	Complete
MSD	B0509148-01A-MSD	D14-Terphenyl	20.	33	141	Complete
Wash Bay	B0509148-01A	D14-Terphenyl	26	33	141	Rrun

METHOD BLANK OUTLIERS:
There are no method blank outliers.

LCS OUTLIERS:
The LCS and LCSD shown below have a couple of the targets outside of control windows.

Type	BatchNumber	Analyte	Recovery	LCL	UCL	Status
LCS	T051004033	Hexachlorobutadiene	52.1	60	140	Complete
LCS	T051004033	Pentachlorophenol	27.0	49	140	Complete
LCS	T051004033	Hexachloroethane	48.2	60	140	Complete

MS/MSD and DUP OUTLIERS:
The matrix spike and matrix spike duplicate recoveries shown below indicates a possible matrix effect with the exception of the targets also out in the LCS shown above, which indicates a laboratory bias.

Type	Client Sample	LabSample	Analyte	Recovery	LCL	UCL	Parent	Spike
MS	Wash Bay	B0509148-01A	Hexachlorobutadiene	52.6	60	140	0.00	0.250
MS	Wash Bay	B0509148-01A	2,4,6-Trichloropheno	51.5	56	129	0.00	0.250
MS	Wash Bay	B0509148-01A	Hexachloroethane	49.1	60	140	0.00	0.250
MS	Wash Bay	B0509148-01A	2,4,5-Trichloropheno	56.8	60	140	0.00	0.250
MSD	Wash Bay	B0509148-01A	Hexachloroethane	53.6	60	140	0.00	0.250
MSD	Wash Bay	B0509148-01A	Hexachlorobutadiene	59.2	60	140	0.00	0.250

Test Method: SW9014 -Colormetric/Titrimetric CN Determination - Reactive CN - Aqueous

HOLDING TIMES:
Holding times were met for this Test

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:
There were no unusual observations.

INITIAL CALIBRATIONS:
Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:
Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:
Closing continuing calibrations were within method criteria or not applicable.

METHOD BLANK OUTLIERS:
There are no method blank outliers.

LCS OUTLIERS:
There are no LCS outliers.

MS/MSD and DUP OUTLIERS:
There are no MS/MSD or DUP outliers.

There are no MS/MSD or DUP outliers.

Test Method: SW9034 - Titrimetric Procedure for Sulfides - Reactive S - Aqueous

HOLDING TIMES:
Holding times were met for this Test

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:
There were no unusual observations.

METHOD BLANK OUTLIERS:
There are no method blank outliers.

LCS OUTLIERS:
There are no LCS outliers.

MS/MSD and DUP OUTLIERS:
There are no MS/MSD or DUP outliers.

Test Method: SW9040B - pH Electrometric Measurement - pH Corrosivity - Aqueous

HOLDING TIMES:
Holding times were met for this Test

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:
There were no unusual observations.

INITIAL CALIBRATIONS:
Initial calibrations were within method criteria.

OPENING CONTINUING CALIBRATIONS:
Opening continuing calibrations were within method criteria.

CLOSING CONTINUING CALIBRATIONS:
Closing continuing calibrations were within method criteria or not applicable.

METHOD BLANK OUTLIERS:
There are no method blank outliers.

LCS OUTLIERS:
There are no LCS outliers.

MS/MSD and DUP OUTLIERS:
There are no MS/MSD or DUP outliers.

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): B0509148

Project: **Wash Bay Testing**

Client: **K. P. Kauffman Co.**

Client Project Number: **None**

Report Section: Client Sample Report

Client Sample Name: **Wash Bay**

Matrix: Aqueous Collection Date: 9/23/2005 3:30:00PM

The following test was conducted by: Analytica - Anchorage

Lab Sample Number: B0509148-01G Analysis Date: 9/29/2005 4:59:19PM
Prep Date: 9/29/2005 Instrument: TOC-5000
Analytical Method ID: SM5310B- Organic Carbon by Combustion and IR. - TOC File Name:
Prep Method ID: SM5310B Dilution Factor: 10
Prep Batch Number: A050929003
Report Basis: As Received Analyst Initials: SG
Sample prep wt./vol: 1.00 ml Prep Extract Vol: 1.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Total Organic Carbon		90		mg/L	10	3.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-01A Analysis Date: 10/6/2005 8:11:00PM
Prep Date: 10/4/2005 Instrument: MS1BNA
Analytical Method ID: 8270C / 1311-SVOA File Name: 05100611.D
Prep Method ID: LLE Dilution Factor: 1
Prep Batch Number: T051004033
Report Basis: As Received Analyst Initials: jk
Sample prep wt./vol: 200.00 ml Prep Extract Vol: 2.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
2,4,5-Trichlorophenol	95-95-4	ND		mg/L	0.025	0.0034	1
2,4,6-Trichlorophenol	88-06-2	ND		mg/L	0.025	0.0048	
2,4-Dinitrotoluene	121-14-2	ND		mg/L	0.025	0.0035	
2-Methylphenol	95-48-7	ND		mg/L	0.025	0.0052	
3&4-Methylphenol	106-44-5	ND		mg/L	0.025	0.013	
Hexachlorobenzene	118-74-1	ND		mg/L	0.025	0.0034	
Hexachlorobutadiene	87-68-3	ND		mg/L	0.025	0.0085	
Hexachloroethane	67-72-1	ND		mg/L	0.025	0.011	
Nitrobenzene	98-95-3	ND		mg/L	0.025	0.0042	
Pentachlorophenol	87-86-5	ND		mg/L	0.025	0.0036	
Pyridine	110-86-1	ND		mg/L	0.056	0.00039	

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:	
2,4,6-Tribromophenol	118-79-6	**0.46**		mg/L	0.00015	0.082	0.75	**60.8**	10	123	1	
2-Fluorobiphenyl	321-60-8	**0.36**		mg/L	0.00015	0.00015	0.50	**71.1**	43	116		
2-Fluorophenol	367-12-4	**0.38**		mg/L	0.00015	0.00015	0.75	**50.3**	21	100		
D14-Terphenyl	92-94-4D	**0.13**		mg/L	0.00015	0.00015	0.50	**25.0**	33	141		LOW
D5-Nitrobenzene	98-95-3D	**0.31**		mg/L	0.00015	0.00015	0.50	**61.4**	35	114		
D6-Phenol	108-95-2D	**0.36**		mg/L	0.00015	0.00015	0.75	**47.6**	10	94		

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-01A Analysis Date: 10/5/2005 10:50:00PM
Prep Date: 10/5/2005 Instrument: MS3VOA

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): B0509148

Project: **Wash Bay Testing**

Client: **K. P. Kauffman Co.**

Client Project Number: **None**

Report Section: Client Sample Report

Client Sample Name: **Wash Bay**

Matrix: Aqueous

Collection Date: 9/23/2005 3:30:00PM

Analytical Method ID: 8260B / _1311

Prep Method ID: 1311

Prep Batch Number: T051006004

Report Basis: As Received

Sample prep wt./vol: 5.00 ml

File Name: 05100514.D

Dilution Factor: 5

Analyst Initials: mbi

Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
1,1-Dichloroethene	75-35-4	ND		ug/L	10	1.7	1
1,2-Dichloroethane	107-06-2	ND		ug/L	10	1.8	
2-Butanone	78-93-3	69	J	ug/L	250	2.6	
Benzene	71-43-2	5.7	J	ug/L	10	0.88	
Carbon Tetrachloride	56-23-5	ND		ug/L	10	0.85	
Chlorobenzene	108-90-7	ND		ug/L	10	0.55	
Chloroform	67-66-3	ND		ug/L	10	1.3	
Tetrachloroethene	127-18-4	ND		ug/L	10	0.58	
Trichloroethene	79-01-6	ND		ug/L	10	1.3	
Vinyl Chloride	75-01-4	ND		ug/L	10	1.6	

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
1,2-Dichloroethane-d4	17060-07-0	**230**		ug/L	0.50	0.13	250	**92.3**	70	130	1
Dibromofluoromethane	1868-53-7	**240**		ug/L	25	5.0	250	**96.0**	70	130	
p-Bromofluorobenzene	460-00-4	**240**		ug/L	25	5.0	250	**97.0**	70	130	
Toluene D-8	108-88-3D	**240**		ug/L	25	5.0	250	**94.5**	70	130	

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-01E

Prep Date: 9/30/2005

Analytical Method ID: 200. 7 - Metals by ICP - Total (new)

Prep Method ID: 200.7

Prep Batch Number: T050930014

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 10/4/2005 10:50:00AM

Instrument: ICP_2

File Name: E10045A

Dilution Factor: 1

Analyst Initials: CCJ

Prep Extract Vol: 50.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Calcium	7440-70-2	**160**		mg/L	0.10	0.013	1
Iron	7439-89-6	**8.1**		mg/L	0.050	0.0027	
Magnesium	7439-96-5	**41**		mg/L	0.10	0.012	
Potassium	7440-09-7	**61**		mg/L	1.0	0.31	

Lab Sample Number: B0509148-01E

Prep Date: 9/30/2005

Analytical Method ID: 200. 7 - Metals by ICP - Total (new)

Prep Method ID: 200.7

Prep Batch Number: T050930014

Report Basis: As Received

Sample prep wt./vol: 50.00 ml

Analysis Date: 10/6/2005 2:10:00PM

Instrument: ICP_2

File Name: E10065A

Dilution Factor: 5

Analyst Initials: CC

Prep Extract Vol: 50.00 ml

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): B0509148

Project: **Wash Bay Testing**

Client: **K. P. Kauffman Co.**

Client Project Number: **None**

Report Section: Client Sample Report

Client Sample Name: **Wash Bay**

Matrix: Aqueous Collection Date: 9/23/2005 3:30:00PM

Lab Sample Number: B0509148-01E
Prep Date: 9/30/2005
Analytical Method ID: 200. 7 - Metals by ICP - Total (new)
Prep Method ID: 200.7
Prep Batch Number: T050930014
Report Basis: As Received
Sample prep wt./vol: 50.00 ml

Analysis Date: 10/6/2005 2:10:00PM
Instrument: ICP_2
File Name: E10065A
Dilution Factor: 5
Analyst Initials: CC
Prep Extract Vol: 50.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Sodium	7440-23-5	4,100		mg/L	15	0.14	3

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-01A
Prep Date: 10/4/2005
Analytical Method ID: 7470A / 1311-Hg
Prep Method ID: 3020A
Prep Batch Number: T051004014
Report Basis: As Received
Sample prep wt./vol: 30.00 ml

Analysis Date: 10/6/2005 2:02:09PM
Instrument: GFAA_1
File Name: B051006W.W
Dilution Factor: 1
Analyst Initials: IJ
Prep Extract Vol: 30.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
OK Mercury	7439-97-6	ND		mg/L	0.00020	0.000050	2

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-01B
Prep Date: 10/4/2005
Analytical Method ID: 6010B / 1311-metals
Prep Method ID: 1311
Prep Batch Number: T051004011
Report Basis: As Received
Sample prep wt./vol: 10.00 ml

Analysis Date: 10/4/2005 2:25:00PM
Instrument: ICP_2
File Name: E10045A
Dilution Factor: 1
Analyst Initials: CCJ
Prep Extract Vol: 50.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
OK Arsenic	7440-38-2	ND		mg/L	0.50	0.077	1
OK Barium	7440-39-3	61		mg/L	0.050	0.00080	
OK Cadmium	7440-43-9	ND		mg/L	0.030	0.0026	
OK Chromium	7440-47-3	ND		mg/L	0.050	0.0090	
OK Lead	7439-92-1	ND		mg/L	0.25	0.054	
OK Selenium	7784-49-2	ND		mg/L	0.50	0.13	
OK Silver	7440-22-4	ND		mg/L	0.075	0.0033	

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-01H
Prep Date: 9/29/2005
Analytical Method ID: 1664 Hexane Extractable Material - Oil & Grease
Prep Method ID: 1664_W

Analysis Date: 9/29/2005 10:00:00AM
Instrument: SCALE
File Name:
Dilution Factor: 1

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): B0509148

Project: Wash Bay Testing

Client: K. P. Kauffman Co.

Client Project Number: None

Report Section: Client Sample Report

Client Sample Name: Wash Bay

Matrix: Aqueous Collection Date: 9/23/2005 3:30:00PM

Prep Batch Number: T050930017
Report Basis: As Received
Sample prep wt./vol: 1,000.00 ml
Analyst Initials: ko/LQ
Prep Extract Vol: 1.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Hexane-Extractable Material	na	8.2		mg/L	5.0	1.5	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-01D
Prep Date: 9/28/2005
Analytical Method ID: Aromatic VOCs by GC/PID via method 8021B - BTEX
Prep Method ID: P&TWater
Prep Batch Number: T050929001
Report Basis: As Received
Sample prep wt./vol: 5.00 ml
Analysis Date: 9/29/2005 12:11:00AM
Instrument: gc_b
File Name: 05092818.D
Dilution Factor: 1
Analyst Initials: MB
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Ethylbenzene	100-41-4	ND		ug/L	1.0	0.088	1

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
p-Bromofluorobenzene	460-00-4	35		ug/L	0.50	0.12	30	118	80	120	1

Lab Sample Number: B0509148-01D
Prep Date: 10/3/2005
Analytical Method ID: Aromatic VOCs by GC/PID via method 8021B - BTEX
Prep Method ID: P&TWater
Prep Batch Number: T051004020
Report Basis: As Received
Sample prep wt./vol: 5.00 ml
Analysis Date: 10/4/2005 6:46:00AM
Instrument: gc_b
File Name: 05100323.D
Dilution Factor: 2
Analyst Initials: MB
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Benzene	71-43-2	71		ug/L	2.0	0.15	2
Toluene	108-88-3	82		ug/L	2.0	0.16	
Xylenes, Total	1330-20-7	230		ug/L	4.0	0.40	

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-01C
Prep Date: 10/5/2005
Analytical Method ID: SM2710F - Test on Sludges, Specific Gravity - Specific Gravity
Prep Method ID: Specific_Gravity
Prep Batch Number: T051005007
Report Basis: As Received
Sample prep wt./vol: 10.00 ml
Analysis Date: 10/5/2005 10:59:59AM
Instrument: SCALE
File Name:
Dilution Factor: 1
Analyst Initials: K Stone
Prep Extract Vol: 10.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Specific Gravity		1.05		NA	0.10	0.10	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-01C
Analysis Date: 9/23/2005 4:42:46PM

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): B0509148

Project: **Wash Bay Testing**

Client: **K. P. Kauffman Co.**

Client Project Number: **None**

Report Section: Client Sample Report

Client Sample Name: **Wash Bay**

Matrix: Aqueous Collection Date: 9/23/2005 3:30:00PM

Prep Date: 9/23/2005
Analytical Method ID: SW9040B - pH Electrometric Measurement - pH Corrosivity
Prep Method ID: 150.1
Prep Batch Number: T050929006
Report Basis: As Received
Sample prep wt./vol: 10.00 ml

Instrument: Probe
File Name:
Dilution Factor: 1
Analyst Initials: I Kirchner
Prep Extract Vol: 10.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
pH		7.3		pH	0.10	0.10	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-01B
Prep Date: 9/28/2005
Analytical Method ID: SW9034 - Titrimetric Procedure for Sulfides - Reactive S
Prep Method ID: 7.3.4.2
Prep Batch Number: T050929015
Report Basis: As Received
Sample prep wt./vol: 10.00 ml

Analysis Date: 9/29/2005 10:43:02AM
Instrument: Titrametric
File Name:
Dilution Factor: 0
Analyst Initials: K Stone
Prep Extract Vol: 50.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Sulfide, Reactive		ND		mg/Kg	130	47	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-01B
Prep Date: 9/28/2005
Analytical Method ID: SW9014 -Colormetric/Titrimetric CN Determination - Reactive CN
Prep Method ID: 7.3.3.2
Prep Batch Number: T050929028
Report Basis: As Received
Sample prep wt./vol: 10.00 ml

Analysis Date: 9/29/2005 2:01:30PM
Instrument: Hach 2500 Col
File Name:
Dilution Factor: 1
Analyst Initials: K Stone
Prep Extract Vol: 50.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Cyanide		ND		mg/Kg	2.5	0.43	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-01F
Prep Date: 10/5/2005
Analytical Method ID: SW1010 - Pensky-Martens Closed Cup Ignitability - Ignitability
Prep Method ID: 1010
Prep Batch Number: T051005017
Report Basis: As Received
Sample prep wt./vol: 40.00 ml

Analysis Date: 10/5/2005 2:49:44PM
Instrument: Flashpoint Tes
File Name:
Dilution Factor: 1
Analyst Initials: K Stone
Prep Extract Vol: 40.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Ignitability		200		Deg. F	47	1.5	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-01F Analysis Date: 9/27/2005 4:09:32PM

Workorder (SDG): B0509148

Project: **Wash Bay Testing**

Client: **K. P. Kauffman Co.**

Client Project Number: **None**

Report Section: Client Sample Report

Client Sample Name: **Wash Bay**

Matrix: Aqueous Collection Date: 9/23/2005 3:30:00PM

Prep Date: 9/27/2005
Analytical Method ID: 120.1 Specific Conductance - Conductivity
Prep Method ID: 120.1
Prep Batch Number: T050928003
Report Basis: As Received
Sample prep wt./vol: 100.00 ml

Instrument: Probe
File Name:
Dilution Factor: 1
Analyst Initials: K Stone
Prep Extract Vol: 100.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Conductance		13		umhos/cm	5.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-01F
Prep Date: 9/30/2005
Analytical Method ID: 160.1 - Total Dissolved Solids dried at 180°C - TDS
Prep Method ID: 160.1
Prep Batch Number: T051003008
Report Basis: As Received
Sample prep wt./vol: 50.00 ml

Analysis Date: 10/3/2005 10:05:24AM
Instrument: SCALE
File Name:
Dilution Factor: 1
Analyst Initials: k wheeler
Prep Extract Vol: 1.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Total Dissolved Solids		8,300		mg/L	20	16	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-01F
Prep Date: 9/30/2005
Analytical Method ID: Inorganic Anions by Ion Chromatography - Anions by IC
Prep Method ID: 300.0
Prep Batch Number: T050930007
Report Basis: As Received
Sample prep wt./vol: 20.00 ml

Analysis Date: 9/30/2005 10:33:00PM
Instrument: IC
File Name: 050930_035.D
Dilution Factor: 5
Analyst Initials: xx
Prep Extract Vol: 20.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Chloride		430		mg/L	4.0	0.21	1
Nitrite as N		ND		mg/L	2.0	0.12	

Lab Sample Number: B0509148-01F
Prep Date: 9/30/2005
Analytical Method ID: Inorganic Anions by Ion Chromatography - Anions by IC
Prep Method ID: 300.0
Prep Batch Number: T050930007
Report Basis: As Received
Sample prep wt./vol: 20.00 ml

Analysis Date: 9/30/2005 10:52:59PM
Instrument: IC
File Name: 050930_036.D
Dilution Factor: 1
Analyst Initials: xx
Prep Extract Vol: 20.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Bromide		57		mg/L	0.80	0.087	2
Fluoride		0.77		mg/L	0.40	0.031	
Nitrate as N		0.77		mg/L	0.40	0.028	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): B0509148

Project: **Wash Bay Testing**

Client: **K. P. Kauffman Co.**

Client Project Number: **None**

Report Section: Client Sample Report

Client Sample Name: **Wash Bay**

Matrix: Aqueous

Collection Date: 9/23/2005 3:30:00PM

Lab Sample Number:	B0509148-01F	Analysis Date:	9/30/2005 10:52:59PM
Prep Date:	9/30/2005	Instrument:	IC
Analytical Method ID:	Inorganic Anions by Ion Chromatography - Anions by IC	File Name:	050930_036.D
Prep Method ID:	300.0	Dilution Factor:	1
Prep Batch Number:	T050930007		
Report Basis:	As Received	Analyst Initials:	xx
Sample prep wt./vol:	20.00 ml	Prep Extract Vol:	20.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Ortho-Phosphate as P		**0.56**	J	mg/L	0.80	0.092	2
Sulfate		**29**		mg/L	1.5	0.11	

Detailed Analytical Report

Analytica Environmental Laboratories, Inc.

Workorder (SDG): B0509148

Project: **Wash Bay Testing**

Client: **K. P. Kauffman Co.**

Client Project Number: **None**

Report Section: Client Sample Report

Client Sample Name: **Trip Blank**

Matrix: Aqueous Collection Date: 9/23/2005 3:30:00PM

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B0509148-02A
Prep Date: 9/28/2005
Analytical Method ID: Aromatic VOCs by GC/PID via method 8021B - BTEX
Prep Method ID: P&TWater
Prep Batch Number: T050929001
Report Basis: As Received
Sample prep wt./vol: 5.00 ml

Analysis Date: 9/28/2005 10:15:00PM
Instrument: gc_b
File Name: 05092815.D
Dilution Factor: 1
Analyst Initials: MB
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Benzene	71-43-2	ND		ug/L	1.0	0.074	1
Ethylbenzene	100-41-4	ND		ug/L	1.0	0.088	
Toluene	108-88-3	ND		ug/L	1.0	0.078	
Xylenes, Total	1330-20-7	ND		ug/L	2.0	0.20	

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
p-Bromofluorobenzene	460-00-4	34		ug/L	0.50	0.12	30	113	80	120	1

Workorder (SDG): B0509148

Project: **Wash Bay Testing**

Client: **K. P. Kauffman Co.**

Client Project Number: **None**

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID: **49,096** **Lab Project Number:** **B0509148**

Prep Date: 9/27/2005

Lab Method Blank Id: T050928003-MB
Prep Batch ID: T050928003
Method: 120.1 Specific Conductance - Conductivity

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
B0509096-01D	Batch QC		9/27/2005 4:09:32PM
B0509148-01F	Wash Bay		9/27/2005 4:09:32PM
T050928003-LCS	LCS		9/27/2005 4:09:32PM
T050928003-LCSD	LCSD		9/27/2005 4:09:32PM
B0509096-01D-DUP	DUP		9/27/2005 4:09:32PM

Prep Date: 9/28/2005

Lab Method Blank Id: T050929001-MB
Prep Batch ID: T050929001
Method: Aromatic VOCs by GC/PID via method 8021B - BTEX

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
T050929001-LCS	LCS	05092809.D	9/28/2005 6:24:00PM
T050929001-LCSD	LCSD	05092810.D	9/28/2005 7:02:00PM
B0509148-02A	Trip Blank	05092815.D	9/28/2005 10:15:00PM
B0509148-01D	Wash Bay	05092818.D	9/29/2005 12:11:00AM

Prep Date: 9/28/2005

Lab Method Blank Id: T050929015-MB
Prep Batch ID: T050929015
Method: SW9034 - Titrimetric Procedure for Sulfides - Reactive S

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
B0509148-01B	Wash Bay		9/29/2005 10:43:02AM
T050929015-LCS	LCS		9/29/2005 10:43:02AM
T050929015-LCSD	LCSD		9/29/2005 10:43:02AM
B0509148-01B-DUP	DUP		9/29/2005 10:43:02AM
B0509148-01B-MS	MS		9/29/2005 10:43:02AM

Workorder (SDG): B0509148

Project: **Wash Bay Testing**

Client: **K. P. Kauffman Co.**

Client Project Number: **None**

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID: **49,096** **Lab Project Number:** **B0509148**

Prep Date: 9/29/2005

Lab Method Blank Id: T050930017-MB
Prep Batch ID: T050930017
Method: 1664 Hexane Extractable Material - Oil & Grease

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
B0509148-01H	Wash Bay		9/29/2005 10:00:00AM
T050930017-LCS	LCS		9/29/2005 10:00:00AM
T050930017-LCSD	LCSD		9/29/2005 10:00:00AM

Prep Date: 9/30/2005

Lab Method Blank Id: T051003008-MB
Prep Batch ID: T051003008
Method: 160.1 - Total Dissolved Solids dried at 180°C - TDS

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
B0509148-01F	Wash Bay		10/3/2005 10:05:24AM
T051003008-LCS	LCS		10/3/2005 10:05:24AM
T051003008-LCSD	LCSD		10/3/2005 10:05:24AM
B0509148-01F-DUP	DUP		10/3/2005 10:05:24AM
B0509148-01F-MS	MS		10/3/2005 10:05:24AM

Prep Date: 10/4/2005

Lab Method Blank Id: T051004011-MB
Prep Batch ID: T051004011
Method: SW6010B - ICP (TCLP Extracted) - 1311-metals

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
B0509148-01B	Wash Bay	E10045A	10/4/2005 2:25:00PM
T051004011-LCS	LCS	E10045A	10/4/2005 2:15:00PM
T051004011-LCSD	LCSD	E10045A	10/4/2005 2:20:00PM
B0509148-01B-DUP	DUP	E10045A	10/4/2005 2:30:00PM
B0509148-01B-MS	MS	E10045A	10/4/2005 2:35:00PM
B0509148-01B-MSD	MSD	E10045A	10/4/2005 2:40:00PM
B0509148-01B-PDS	PDS	E10045A	10/4/2005 2:45:00PM
T051004011-LCS	LCS	E10055A	10/5/2005 6:55:00PM
T051004011-LCSD	LCSD	E10055A	10/5/2005 7:00:00PM

Workorder (SDG): B0509148

Project: **Wash Bay Testing**

Client: **K. P. Kauffman Co.**

Client Project Number: **None**

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID: **49,096** **Lab Project Number:** **B0509148**

Prep Date: 10/4/2005

Lab Method Blank Id: T051004014-MB
Prep Batch ID: T051004014
Method: SW7470A - Mercury in Liquid Waste by CVAA (TCLP Extracted) -

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
T051004014-LCS	LCS	B051004B.WKS	10/4/2005 4:58:58PM
B0509148-01A	Wash Bay	B051006W.WKS	10/6/2005 2:02:09PM
T051004014-LCSD	LCSD	B051006W.WKS	10/6/2005 1:59:22PM
B0509148-01A-DUP	DUP	B051006W.WKS	10/6/2005 2:04:14PM
B0509148-01A-MS	MS	B051006W.WKS	10/6/2005 2:06:18PM
B0509148-01A-MSD	MSD	B051006W.WKS	10/6/2005 2:08:33PM
B0509148-01A-PDS	PDS	B051006W.WKS	10/6/2005 2:11:22PM

Prep Date: 10/3/2005

Lab Method Blank Id: T051004020-MB
Prep Batch ID: T051004020
Method: Aromatic VOCs by GC/PID via method 8021B - BTEX

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
T051004020-LCS	LCS	05100308.D	10/3/2005 9:08:00PM
T051004020-LCSD	LCSD	05100309.D	10/3/2005 9:47:00PM
B0509148-01D	Wash Bay	05100323.D	10/4/2005 6:46:00AM

Prep Date: 10/4/2005

Lab Method Blank Id: T051004033-MB
Prep Batch ID: T051004033
Method: SW8270C - Semivolatile Organics by GC/MS (TCLP Extracted) - 1

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
T051004033-LCS	LCS	05100610.D	10/6/2005 7:35:00PM
B0509148-01A	Wash Bay	05100611.D	10/6/2005 8:11:00PM
B0509148-01A-MS	MS	05100613.D	10/6/2005 9:21:00PM
B0509148-01A-MSD	MSD	05100614.D	10/6/2005 9:56:00PM

Workorder (SDG): B0509148

Project: **Wash Bay Testing**

Client: **K. P. Kauffman Co.**

Client Project Number: **None**

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID: **49,096** **Lab Project Number:** **B0509148**

Prep Date: 10/5/2005

Lab Method Blank Id: T051005007-MB
Prep Batch ID: T051005007
Method: SM2710F - Test on Sludges, Specific Gravity - Specific Gravity

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
B0509148-01C	Wash Bay		10/5/2005 10:59:59AM
B0509148-01C-DUP	DUP		10/5/2005 10:59:59AM

Prep Date: 10/5/2005

Lab Method Blank Id: T051006004-MB
Prep Batch ID: T051006004
Method: SW8260B - VOCs by GC/MS (TCLP Extracted) - _1311

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
T051006004-LCS	LCS	05100503.D	10/5/2005 4:55:00PM
T051006004-LCSD	LCSD	05100504.D	10/5/2005 5:27:00PM
B0509148-01A	Wash Bay	05100514.D	10/5/2005 10:50:00PM

ANALYTICA

Cooler Receipt Form

Client: K. P. Kauffman Co. Client Code: 012340 Order #: B0509148
Project: Wash Bay Testing

Cooler ID: 1

A. Preliminary Examination Phase: Date cooler opened: 9/23/2005
Cooler opened by: KB Signature: for KB

1. Was airbill Attached? N/A Airbill #: na Carrier Name: Client
2. Custody Seals? N/A How many? 0 Location: na Seal Name: na
3. Seals intact? N/A
4. Screened for radiation? N/A
5. COC Attached? Yes Properly Completed? Yes Signed by AEL employee? Yes
6. Project Identification from custody paper: Wash Bay Water
7. Preservative: None Temperature: 20.0

Designated person initial here to acknowledge receipt: DS/M for KB Date: 9/23/05

COMMENTS:

B. Log-In Phase: Samples Log-in Date: 9/26/2005 Log-in By: dm

1. Packing Type: Bubblewrap
2. Were samples in separate bags? Yes
3. Were containers intact? Yes Labels agree with COC? Yes
4. Number of bottles received: 13 Number of samples received: 1
5. Correct containers used? Yes Correct preservatives added? Yes
6. Sufficient sample volume? Yes
7. Bubbles in VOA samples? No
8. Was Project manager called and status discussed? No
9. Was anyone called? No Who was called? _____ By whom? _____ Date: _____

COMMENTS: